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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/302,471 04/30/99 SHIBUYA

T 774-98129

EXAMINER

IM22/0227

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2033 K STREET NW  
WASHINGTON DC 20006

BRUNSMAN, D  
ART UNIT

PAPER NUMBER

1755  
DATE MAILED:

9  
02/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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**Office Action Summary**

Application No.

09/302,471

Applicant(s)

SHIBUYA ET AL.

Examiner

David M Brunzman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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Applicant's response including translations of the base documents of the prior art relied upon has been received but, not found persuasive.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Adachi et al (CA PLUS AN 1988:514996).

The reference teaches a composition formed by mixing one mole tetramethoxy silane, one mole dimethylformamide, methanol, 10 moles water and 0.001 moles ammonia heated wherein the methanol would be driven off first to be replaced completely by the DMF. The temperature is raised while drying at 150<sup>0</sup>C. The dried material is sintered by increasing the temperature through 1050<sup>0</sup>C (the material passing through the entire range of 350-800<sup>0</sup>C). Page 5, lines 5-13 of the translation explicitly teach the process wherein the above materials are mixed and agitated before a gelling step takes place. The mixture before gelling is indistinguishable from the uniform solution of the instant claims regardless of the intended future processing of the composition.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al as applied above, and further in view of Takei et al (CA PLUS AN 1997:542658).

The difference between Adachi et al and the instant claims is that Adachi et al is directed to formation of glass monoliths. Takei et al teach that similar silane systems can be used to form monoliths or coating films. For example, paragraph 2 of the translation teaches the formation of

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“overlaying batches” of the sol. This discloses the coating of a dried batch with a fresh sol. It would have been obvious to one of ordinary skill in the art to use the compositions and curing conditions of Adachi et al to form films because Takei et al teach such compositions can be used to form films. Furthermore, the difference between monolith and coating is one of shape and a change of shape would have been obvious to one of ordinary skill in the art for the reasons set forth in *In re Dailey et al.*, 149 USPQ 47 and, *Goodrich v. Gates*, 12 USPQ 147. (This second finding of obviousness has not been explicitly addressed in applicant’s response). The similar compositions and curing conditions employed would be expected to produce products with similar properties such as the dielectric constant of claim 16.

Claims 1-3, 5, 6 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomikawa et al (CA PLUS AN 1995:248289).

The reference teaches a coating composition comprising methyltrimethoxysilane, water, N-methyl pyrrolidone and a base and, the film formed therefrom. While the reference does require at least 70% of the silane present be a silane outside the scope of the instant claims, it does specifically disclose exemplary compositions containing MTMS. The use of the term “comprising” in the instant claims leaves the claims open to the presence of additional ingredients, even in major amounts. The similar compositions employed would be expected to produce products with similar properties such as the dielectric constant of claim 16.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M Brunsman whose telephone number is 703-308-3454. The examiner can normally be reached on M, Tu, Th, F (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9049 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

David M Brunsman  
Primary Examiner  
Art Unit 1755

A handwritten signature in black ink, appearing to be 'DMB', with a long horizontal flourish extending to the right.

DMB  
February 26, 2001